WHAT IS CLAIMED IS:

1. A process for the fabrication of a thin-film device, said process comprising the following steps:

forming a protective layer and a thin-film device layer one by one on a first substrate, and bonding a second substrate on said thin-film device layer via at least a first adhesive layer,

removing said first substrate at least in a part thereof by etching with a chemical solution,

bonding said protective layer, which covers said thin-film device layer on a side of said first substrate, to a third substrate via a second adhesive layer, and

removing said second substrate,

wherein said protective layer is formed of at least two layers having resistance to said chemical solution used upon removal of said first substrate.

2. The process for the fabrication of a thin-film device as claimed in claim 1, further comprising the following additional step after said removal of said first substrate:

removing at least a part of said protective layer by etching,

wherein said bonding step to said third substrate comprises bonding said thin-film device layer on the side

of said first substrate to said third substrate via said second adhesive layer.

3. The process for the fabrication of a thin-film device as claimed in claim 1, wherein said protective layer comprises a layer, which has no resistance to said chemical solution used upon removal of said first substrate, between at least said two layers having resistance to said chemical solution.

4. The process for the fabrication of a thin-film device as claimed in claim 1, wherein, when a layer formed as at least a portion of said protective layer and having no resistance to said chemical solution used upon removal of said first substrate is removed with a chemical solution of the same kind as said chemical solution used upon removal of said first substrate, an etch rate of said layer formed as at least said portion of said protective layer and having no resistance to said chemical solution used upon removal of said first substrate is lower than an etch rate of said first substrate.

5. The process for the fabrication of a thin-film device as claimed in claim 1, wherein said at least two layers in said protective layer, said at least two layers having resistance to said chemical solution used upon

removal of said first substrate, are made of materials etchable with a common chemical solution and, when etched with said common chemical solution, said etching of one of said at least two layers in said protective layer, said one layer being closer to said first substrate, is completed earlier than that of the other layer.

6. The process for the fabrication of a thin-film device as claimed in claim 1, wherein at least one of said at least two layers in said protective layer, said at least two layers having resistance to said chemical solution used upon removal of said first substrate, is not etchable with a common chemical solution.

7. The process for the fabrication of a thin-film device as claimed in claim 1, wherein one of said at least two layers in said protective layer, said at least two layers having resistance to said chemical solution used upon removal of said first substrate and said one layer being closest to said thin-film device layer, consists of a layer transparent to visible light.

8. The process for the fabrication of a thin-film device as claimed in claim 1, wherein said first substrate consists of a glass substrate, and said chemical solution used upon removal of said first substrate is a chemical solution with hydrofluoric acid

contained therein.

9. The process for the fabrication of a thin-film device as claimed in claim 1, wherein said first substrate consists of a silica substrate, and said chemical solution used upon removal of said first substrate is a chemical solution with hydrofluoric acid contained therein.

10. The process for the fabrication of a thin-film device as claimed in claim 1, wherein said second substrate is bonded on said thin-film device layer via a coating layer and said first adhesive layer.

11. A thin-film device formed by performing the following steps:

forming a protective layer and a thin-film device layer one by one on a first substrate, and bonding a second substrate on said thin-film device layer via at least a first adhesive layer,

removing said first substrate at least in a part thereof by etching with a chemical solution,

bonding said protective layer, which covers said thin-film device layer on a side of said first substrate, to a third substrate via a second adhesive layer, and

removing said second substrate,

wherein said protective layer is formed of at least

two layers having resistance to said chemical solution used upon removal of said first substrate.

12. The process for the fabrication of a thin-film device as claimed in claim 11, wherein said second substrate is bonded on said thin-film device layer via a coating layer and said first adhesive layer.

13. A process for the fabrication of a thin-film device, said process comprising the following steps:

forming a protective layer and a thin-film device layer one by one on a first substrate, and bonding a second substrate on said thin-film device layer via at least a first adhesive layer,

separating said first substrate at least in a part thereof by etching with a chemical solution,

bonding said protective layer, which covers said thin-film device layer on a side of said first substrate, to a third substrate via a second adhesive layer, and

separating said second substrate,

wherein said protective layer is formed of at least two layers having resistance to said chemical solution used upon separation of said first substrate.

14. The process for the fabrication of a thin-film device as claimed in claim 13, further comprising the following additional step after said separation of said

first substrate:

separating at least a part of said protective layer by etching,

wherein said bonding step to said third substrate comprises bonding said thin-film device layer on the side of said first substrate to said third substrate via said second adhesive layer.

15. The process for the fabrication of a thin-film device as claimed in claim 13, wherein said protective layer comprises a layer, which has no resistance to said chemical solution used upon separation of said first substrate, between at least said two layers having resistance to said chemical solution.

16. The process for the fabrication of a thin-film device as claimed in claim 13, wherein, when a layer formed as at least a portion of said protective layer and having no resistance to said chemical solution used upon separation of said first substrate is separated with a chemical solution of the same kind as said chemical solution used upon separation of said first substrate, an etch rate of said layer formed as at least said portion of said protective layer and having no resistance to said chemical solution used upon separation of said first substrate is lower than an etch rate of said first

substrate.

17. The process for the fabrication of a thin-film device as claimed in claim 13, wherein said at least two layers in said protective layer, said at least two layers having resistance to said chemical solution used upon separation of said first substrate, are made of materials etchable with a common chemical solution and, when etched with said common chemical solution, said etching of one of said at least two layers in said protective layer, said one layer being closer to said first substrate, is completed earlier than that of the other layer.

18. The process for the fabrication of a thin-film device as claimed in claim 13, wherein at least one of said at least two layers in said protective layer, said at least two layers having resistance to said chemical solution used upon separation of said first substrate, is not etchable with a common chemical solution.

19. The process for the fabrication of a thin-film device as claimed in claim 13, wherein one of said at least two layers in said protective layer, said at least two layers having resistance to said chemical solution used upon separation of said first substrate and said one layer being closest to said thin-film device layer, consists of a layer transparent to visible light.

20. The process for the fabrication of a thin-film device as claimed in claim 13, wherein said first substrate consists of a glass substrate, and said chemical solution used upon separation of said first substrate is a chemical solution with hydrofluoric acid contained therein.

21. The process for the fabrication of a thin-film device as claimed in claim 13, wherein said first substrate consists of a silica substrate, and said chemical solution used upon separation of said first substrate is a chemical solution with hydrofluoric acid contained therein.

22. The process for the fabrication of a thin-film device as claimed in claim 13, wherein said second substrate is bonded on said thin-film device layer via a coating layer and said first adhesive layer.

23. A thin-film device formed by performing the following steps:

forming a protective layer and a thin-film device layer one by one on a first substrate, and bonding a second substrate on said thin-film device layer via at least a first adhesive layer,

separating said first substrate at least in a part thereof by etching with a chemical solution,

bonding said protective layer, which covers said thin-film device layer on a side of said first substrate, to a third substrate via a second adhesive layer, and

separating said second substrate,

wherein said protective layer is formed of at least two layers having resistance to said chemical solution used upon separation of said first substrate.

24. The process for the fabrication of a thin-film device as claimed in claim 23, wherein said second substrate is bonded on said thin-film device layer via a coating layer and said first adhesive layer.